



**INVESTIGATION ON TOXIC GASES IN FOUNDRY INDUSTRY**

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“I declared that this thesis is the result of my own work except the ideas and summaries which I have clarified their sources. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any degree”

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## **ABSTRACT**

Industrial pollution has given a major burden on the world health. Long term exposure to air pollution may lead to health effect, including respiratory disease, lung cancer and heart. Industry that contributes to large number of air pollution is manufacturing industry. The objectives of the study are to identify workers' risk factor in the workplace area and to determine the acceptable worker risk factor. The study is focus on the foundry (casting) at one of the manufacturing company located in Shah Alam. The parameters measured are physical measurements (temperature and humidity) and toxic gases (carbon dioxide, carbon monoxide, hydrogen chloride, chlorine and ammonia). The data collection method based on Code of Practice of Indoor Air Quality (COP-IAQ) established by Department of Occupational Safety and Health (DOSH, 2005) and Basic of Industrial Hygiene. Results show that the values of air pollution concentration are below the level of concentration that course adverse effect on health after comparing the result with the standard from DOSH. Thus, the company has low level of risk to the workers. Recommendation for further improvement at the work place such as technique of ventilation and removal of toxic were discussed.

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